TEXTBOOK

The textbook for this course is *Precalculus*, Fifth Edition by Stewart, Redlin, and Watson. Bring your book to class; we will be working problems from the book in class. **Read the textbook.** I do not necessarily cover in class all the material for which you are responsible, so you must read the textbook. In addition to the textbook, you will need a cheap ($10 - $15) scientific calculator. More details will be given in class.

ATTENDANCE

Attendance is taken at every class meeting. Regular attendance is necessary for optimum performance. Each class will begin and end at the time scheduled. Being late and/or attempting to leave early is rude and disruptive to the class. Not only should you be physically present during the class but you should be ready to learn. Students are responsible for all information given in class (changes in homework, test dates, etc.) and all material covered in class, even if they were absent from class. Any student missing more than 2 class meetings risks being dropped from the class.

OFFICE HOURS

My office hours are listed at the top of this page. These are times when I can give you individual attention. This time can be used to work tricky homework problems, explain difficult topics, discuss course progress, or address other course concerns.

EXAMS

There will be 3 big exams. The tentative dates for the exams are March 25, May 6, and June 10.

QUIZZES

There will be 6 quizzes, given on a roughly biweekly schedule, given throughout the semester.

PROJECTS

There will be a number of projects or extra homework handouts distributed throughout the semester. These will be collected and graded.

HOMEWORK

Math is not a spectator sport. Homework assignments will be given for each section covered. It is assumed that you have completed the homework problems by the class session after the one in which the material was presented. Homework problems are not usually discussed in class. If you have questions about the homework, come and see me during office hours. That is the purpose of office hours.

EXTRA CREDIT

It is possible to earn extra credit points by correcting mathematical errors committed by the professor during lectures or on handouts (if you are the first to catch the error and do so in a timely manner). In addition, a few extra credit projects may be offered. These are not required and not doing them will not adversely affect your grade.

GRADING

Each exam is worth 135 points. Each quiz is worth 25 points. The two lowest quiz scores will be dropped. The projects will be worth a total of 70 points. There will be 575 points possible for the entire semester. At the end of the semester the grading scale will be:
The Mathematics Study Center is located in MCS 106. Tutors are available there. The tutors can help you best if you have tried to work the problems and have specific questions. You are encouraged to seek out extra help whenever necessary in the tutoring room. Many students routinely work on their homework in the tutoring room, asking for help from the tutors when (and if) they need it.

Tutoring is also available on other areas of campus (for free) or from private tutors (for money). If you qualify, EOPS provides tutoring. There is also limited tutoring in the Learning Resource Center in the campus library. Private tutors advertise in various locations on campus. I have no idea of the quality or expense of these tutors. I personally would not use them until I had tried all of the free help which is available.

The campus bookstore (as well as other bookstores) has an assortment of supplementary books on math. There are books on solving word problems, books on general study habits, and books specific to math at the precalculus level. I have not read all of these books and so can not tell you which are useful and which are not, but you can probably tell something about them after thumbing through them for a few minutes.

Please turn off cell phones while you are in class. If you absolutely must have your phone turned on, set it to vibrate instead of ring. Do not answer your phone in the classroom. On the days of the big exams be prepared to sit for 2 1/2 hours. Please plan ahead; bathroom breaks (during exams) are not allowed except in case of illness.

The following 10 goals are the course objectives for Math 180, taken from the official course outline. The material for which you will be responsible this semester will include, but not be limited to, the items in this list.

- Analyze functions (including polynomial, algebraic, rational, exponential, logarithmic, trigonometric) for critical features, including: intercepts, asymptotes, domain, range, and average rate of change.
- Determine the inverse of a function (polynomial, algebraic, rational, exponential, logarithmic, trigonometric) and analyze it in terms of critical features.
- Graph relations (including polynomial, rational, exponential, logarithmic, trigonometric functions and conics), using transformations (shifting, stretching, reflection).
- Determine functions (including polynomial, rational, exponential, logarithmic, trigonometric) that model data.
- Solve equations involving polynomial, rational, exponential, logarithmic, trigonometric functions.
- Use polar and parametric functions to solve a variety of problems.
- Use arithmetic and geometric series and sequences to solve a variety of problems.
- Use matrices and systems of equations to solve a variety of problems.
- Solve application problems using the topics of the course.
- Use technology (graphing, scientific calculators or computer software) to solve problems.

The following 7 objectives are the Student Learning Objectives for this course. This list is not exhaustive; you will be held responsible for all items on this list as well as items not on this list.

- Students will find zeros of polynomial functions by factoring polynomials using polynomial division and the factor theorem.
- Students will solve algebraic, exponential, logarithmic, trigonometric, absolute value equations, and systems of equations using matrices.
- Solve problems involving arithmetic and geometric sequence and series.
- Students will graph algebraic, exponential, logarithmic, and trigonometric functions, and sketch functions in polar and parametric forms.
- Students will prove trigonometric identities using the sum, difference, double-angle, and half-angle formulas.
- Students will solve application problems at the pre-calculus level and use mathematical induction to write proofs.
- Students will solve quadratic and rational inequalities and inequalities with absolute values.